

**WE CLAIM:**

1. A global appliance network system, comprising:

a local smart appliance network, including at least one smart appliance, said local smart appliance network having a general unique global network address;

5 a global network agent, including a global server, said global server communicating with said smart appliance using a general addressing scheme identifying in a single message both said smart appliance network by said general unique global network address and the instruction to be performed on said smart appliance; and

10 a communication network interconnecting said local smart appliance network and said global network agent.

2. The global appliance network system of claim 1, wherein said local smart appliance network includes a plurality of smart appliances.

3. The global appliance network system of claim 2, wherein said communication network is the Internet.

15 4. The global appliance network system of claim 1, wherein said global network agent also includes at least one smart appliance.

5. The global appliance network system of claim 1, wherein said global network agent also includes a global smart appliance network.

6. The global appliance network system of claim 1, wherein said general addressing 20 scheme is a modified version of the Session Initiation Protocol.

7. The global appliance network system of claim 6, wherein the general address format of said general addressing scheme is Lightweight Directory Access Protocol.

8. A one-step location-action method for remotely operating a smart appliance in a 25 local smart appliance network from a global agent in a global network, said method comprising

the steps of:

the global agent formulating a one-step message that includes the general global address of the local smart appliance network and the action to be taken by the smart appliance;

transmitting the one-step message over a communication network to the local  
5 smart appliance network;

if between the global network and the local smart appliance network there is a fire  
wall, determining that the global agent is permitted to traverse the firewall; and

unpacking the transmitted one-step message and executing the action to be taken  
by the smart appliance.

10 9. The one-step location-action method of claim 8, wherein said step of transmitting  
the one-step message to the local smart appliance network comprises transmitting said one-step  
message through an intervening network.

10. The one-step location-action method of claim 8, wherein said one-step message  
utilizes a modified version of the Session Initiation Protocol.

15 11. The one-step location-action method of claim 10, wherein said modified version  
of the Session Initiation Protocol utilizes a Lightweight Directory Access Protocol.